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-What is claimed is:

Wear resistant member, comprising:

a silicon natride sintered body;

wherein the silicon nitride sintered body contains from 75 to 97% by mass of silicon nitride, from 0.2 to 5% by mass of particles of titanium nitride of which long axis is 1μ m or less and from 2 to 20% by mass of a grain boundary phase substantially containing Si-R-Al-O-N compound (here, R expresses one of rare earth elements).

2. The wear resistant member as set forth in claim 1: wherein the particles of titanium nitride each are singly particle dispersed in the silicon nitride sintered body.

3. The wear resistant member as set forth in claim 1: wherein the titanium nitride is not dissolved in the silicon nitride and the grain boundary phase as a solid solution.

4. The wear resistant member as set forth in claim 1: wherein the particles of titanium nitride each are particle dispersed in the grain boundary phase.

5. The wear resistant member as set forth in claim 1: wherein the particles of titanium nitride contain 80% by volume or more of particles of which aspect ratio is in the range of from 1.0 to 1.2.

- 6. The wear resistant member as set forth in claim 1: wherein the particles of titanium nitride each are 0.2 $\mu\,\mathrm{m}$ or less in difference of long and short axes.
 - 7. The wear resistant member as set forth in claim 1:

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wherein the particles of titanium nitride each have a roundish shape.

8. The wear resistant member as set forth in claim 1: wherein the silicon nitride sintered body is 0.5% or less in porosity and $2\,\mu\,\mathrm{m}$ or less in maximum pore diameter.

- 9. The wear resistant member as set forth in claim 1: wherein the silicon nitride sintered body is 1000MPa or more in three point flexural strength and 6.5MPa·m^{1/2} or more in fracture toughness.
- '10. The wear resistant member as set forth in claim 1: wherein, by the use of a thrust bearing testing machine, under the conditions of opponent material of SUJ2 steel ball provided by JIS G4805, load of 39.2MPa, and a number of rotation of 1200rpm, when rolling fatigue life is measured until a surface of the wear resistant member is peeled off, the wear resistant member has the rolling fatigue life of 1× 108 times or more by a number of repetition.
 - 11. The wear resistant member as set forth in claim 1: wherein the wear resistant member comprises ball member.
- 12. The wear resistant member as set forth in claim
 11:

wherein the ball member is 200MPa or more in crushing strength and $6.5\text{MPa}\cdot\text{m}^{1/2}$ or more in fracture toughness.

13. The wear resistant member as set forth in claim 25 11:

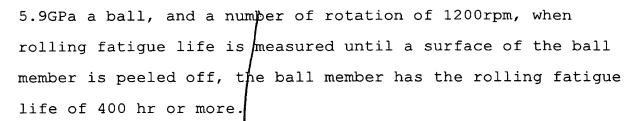
wherein, by the use of a thrust bearing testing machine, under the conditions of opponent material of SUJ2 steel plane table provided by JIS G4805, a maximum contact stress of

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- 14. The wear resistant member as set forth in claim 1:
 wherein the grain boundary phase contains from 0.5 to
 10% by mass of a rare earth element in terms of oxide, from
 0.1 to 5% by mass of aluminum oxide and 5% by mass or less of aluminum nitride.
- 15. The wear resistant member as set forth in claim 1: wherein the silicon nitride sintered body contains at least one of element selected from magnesium, zirconium, hafnium and tungsten in the range of from 0.1 to 5 % by mass in terms of oxide.
- 16. The wear resistant member as set forth in claim 1: wherein the wear resistant member is rolling bearing member.
- 17. A method of manufacturing wear resistant member comprising silicon nitride sintered body, comprising the steps of:

adding, to silicon hitride powder that contains oxygen by 1.7% by mass or less and α -silicon nitride by 90% by mass or more and of which average particle diameter is $1.0\,\mu\mathrm{m}$ or less, from 0.5 to 10% by mass of a rare earth compound in terms of oxide, from 0.1 to 5% by mass of titanium nitride of which average particle diameter is $0.7\,\mu\mathrm{m}$ or less or a titanium compound that converts into titanium nitride due to the sintering in terms of titanium nitride, from 0.1 to 5% by

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mass of aluminum oxide and 5% by mass or less of aluminum nitride are added to prepare a mixture of raw materials; molding the mixture of raw materials into a desired shape;

heat treating, after degreasing the molded body obtained in the step of molding, at a temperature in the range of from 1300 to 1450°C; and

sintering the molded body undergone the heat treatment at a temperature in the range of from 1600 to 1900°C to prepare the silicon nitride sintered body.

18. The method of manufacturing wear resistant member as set forth in claim 17:

wherein, to the silicon nitride powder, the titanium nitride or the titanium compound that converts into titanium nitride due to the sintering is added divided into a plurality of portions to mix.

19. The method of manufacturing wear resistant member as set forth in claim 17:

wherein the mixture of raw materials contains titanium oxide powder of an average particle diameter of $0.5\,\mu\,\mathrm{m}$ or less in the range of from 0.1 to 5% by mass in terms of titanium nitride.

20. The method of manufacturing wear resistant member as set forth in claim 17, further comprising a step of:

implementing HIP treatment under a pressure of 300atm or more in a non-oxidizing atmosphere at a temperature in the range of from 1600 to 1850°C.